TASK 2058

PERFORM SPECIAL PATROL INFILTRATION/EXFILTRATION (SPIES) OPERATIONS

WARNING

Ensure that the SPIES master and crew chief wear a safety harness secured to a tiedown ring anytime cabin doors are opened.

CAUTION

Ensure that SPIES rope remains secured to the cargo hook until the aircraft has landed. If recovery of SPIES rope is impossible, execute a roll-on landing to avoid entanglement in the rotor system.

CONDITIONS: In a UH-60 helicopter with SPIES equipment installed.

STANDARDS: Appropriate common standards plus these additions/modifications:

1. Rated.

a. Conduct a thorough crew and passenger safety briefing.

b. Maintain obstacle clearance between team members, obstacles, and the ground.

c. Maintain airspeed ±5 knots. (Maximum airspeed with team members attached is 70 KIAS in moderate climates and 50 KIAS in cold climates).

d. Bank angle not to exceed 30 degrees.

2. Nonrated. Ensure that the aircraft is prepared for SPIES operations per TC 21-24 and the unit SOP.

DESCRIPTION:

1. Crew actions.

a. The PC will conduct a thorough crew briefing and ensure all crewmembers are familiar with SPIES operations, emergency, and communication procedures. He will ensure the aircraft is rigged.

b. The P* will remain focused primarily outside the aircraft throughout the maneuver for aircraft control and obstacle avoidance. He will announce the intended point of extraction and remain centered over the target with corrections from the SPIES master as required.

c. The P and NCM will assist in clearing the aircraft and will provide adequate warning of obstacles. They will assist the P* during the pickup phase of the operation. They will advise the P* when the slack is out of the rope and when the SPIES members are off the ground and above the highest obstacle. During forward flight, the NCM must constantly monitor the SPIES team members and keep the P* informed of their stability and height above obstacles.

2. Procedures.

a. Ascend at a rate that will ensure the safety of the SPIES members. To avoid "jerking" the SPIES members off the ground, the slack in the rope must be removed cautiously. Do not start forward flight until all obstacles are cleared.

b. Maximum en route airspeed will be no faster than 70 KIAS in moderate climates and 50 KIAS in cold climates while team members are attached to the SPIES rope. Maximum aircraft bank angle will be no greater than 30 degrees. During forward flight the NCM must constantly monitor the SPIES members and keep the P* informed of their stability. In may be necessary to reduce airspeed if SPIES personnel begin to spin, or if the cone angle exceeds 30 degrees.

c. Upon arrival at the dismount area, a transition is made into hovering flight at an altitude of 250 feet AGL. A vertical descent is started with the rate not to exceed 100 foot per minute (at touchdown). Maintain a stable hover until SPIES team members clear the rope.

WATER EXTRACTION CONSIDERATIONS: The SPIES is suitable for extracting teams from the water. For this procedure three inflatable life vests or any type of floatation device is tied to the SPIES rope to provide buoyancy for the rope while in the water. Takeoff, en route, and landing are the same as over land. The dismounting procedures differ when landing on a ship. Once on board, the team members take their orders from personnel in charge of the deck.

NIGHT OR NVG CONSIDERATIONS:

1. For unaided night flight, the landing light and searchlight should be operational. If an NVG filter is in-stalled, it should be removed.

2. Due to the high hover altitude of SPIES operations, it is very difficult to determine altitudes and relative position over the ground. The barometric altimeter is not reliable for this maneuver, but can be used as an aid to help maintain a constant altitude. References, such as tops of trees, lights, and man made objects can be used to help prevent drift by lining up the objects and maintaining their relative position once the aircraft is at a stable altitude.

3. If possible, select an area with good contrast and several reference points at the same or greater height as the SPIES hover altitude. Proper scanning techniques are necessary to avoid spatial disorientation.

4. Spatial disorientation can be overwhelming during over water operations at night. If there are visible lights on the horizon or if the shoreline can be seen, the pilot may opt to approach the survivor(s) so the aircraft is pointed toward these references, if the wind permits. If no other references exist, deploy chemlights to assist in maintaining a stable hover.

TRAINING AND EVALUATION REQUIREMENTS:

1. **Training.** Training will be conducted in the aircraft.

2. **Evaluation.** Evaluation will be conducted in the aircraft.

REFERENCES: Appropriate common references plus the following:

SPIES Air Worthiness Release